THE Canadian Hospital

A Monthly Journal for Hospital Executives

Toronto, Can. **The Edwards Publishing Company** December, 1931

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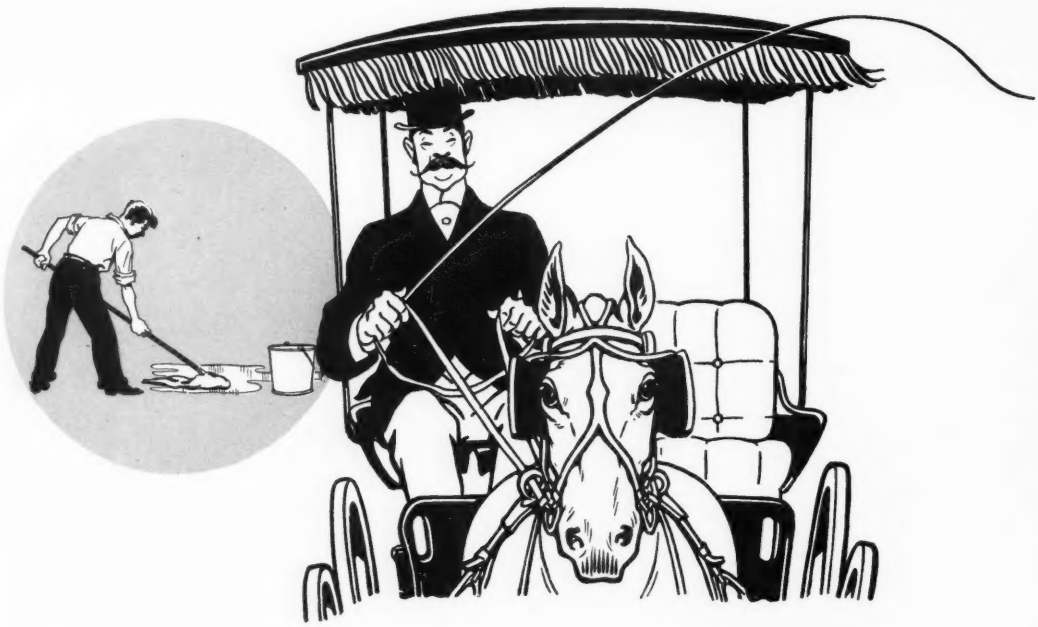

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Finnell-Kote **is a highly condensed form of wax—requiring hot application. By means of a special dispenser unit, which can be attached to any of the *Finnell* models, *Finnell-Kote* is melted and applied to the floor, distributed immediately by the brushes . . . and an instant later can be brought to a beautiful polish by running the brushes again over the area. Saves half the cost of wax and takes but a fraction of the time.**

Please refer to THE CANADIAN HOSPITAL when writing

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A PIN-PRICK *was an Open Door to* Death

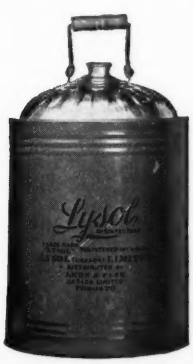
WOUNDED MEN filled the Grand Hotel in Paris. The finest medical talent in France was there to treat them. And yet, the deaths were appalling!

It seemed as if the surgeons' knives were deadlier than enemy bullets. For, almost every man operated on died of infection. In despair, the surgeon Velpeau cried, "A pinprick is a door open to death!"

That was during the Franco-Prussian War, only a brief sixty years ago. Then, the need for disinfection had scarcely been recognized. The theory that germs cause disease and deadly infection was still in dispute!

What a contrast with present conditions! Now, disinfection is almost a religion with the medical profession—and whenever there is a real job of germ-killing to do, doctors and hospitals the world over turn to "Lysol" Disinfectant.

"Lysol" Disinfectant has many uses, both on the body and for the disinfection of surgical appliances. It serves in ward, private room, operating rooms, corridor, kitchen, laundry and laboratory. It disinfects the hands of surgeons and nurses, wounds and lacerations, burns and scalds of patients without irritating or smarting the tissues. "Lysol" Disinfectant gives a clear solution for disinfecting surgical and dental instruments without corroding them. It disinfects rubber gloves and tubing without harming the rubber. It is ideal for cleaning furniture, floors, woodwork, dishes and bedding.



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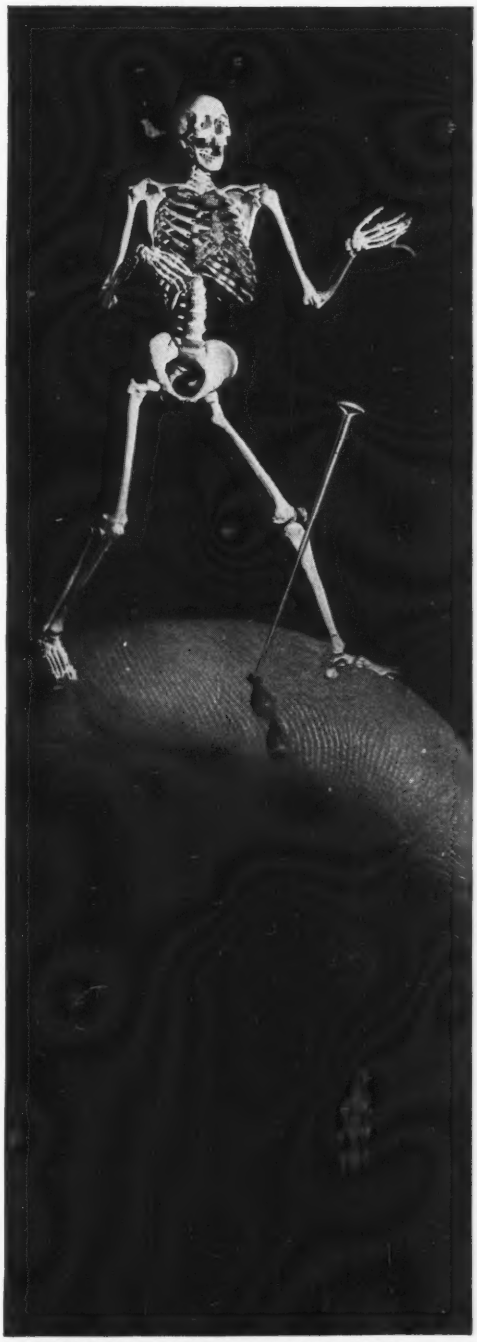
Hospitals find "Lysol" the most economical disinfectant. By being able to purchase it at $1.75 a gallon in 5-gallon lots, they buy it at cost, and obtain the highest quality disinfectant at a price comparable with that of inferior imitations on the market. It is Lehn & Fink's way of helping the splendid work of hospitals in overcoming disease. "Lysol" is the registered trademark of Lysol (Canada) Limited. Distributed by Lehn & Fink (Canada) Limited, Toronto.



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Published in the interests of Hospital Executives

ISSUED ON THE FIFTH
OF EVERY MONTH BY
THE EDWARDS PUBLISHING COMPANY
177 JARVIS STREET
TORONTO 2 - CANADA
Member of Canadian Business Publishers' Association
C. A. EDWARDS - - - - Publisher
MARY L. BURCHER, B.A. - - Editor

Telephone
ADelaide 9634

MEMBER OF HEA HOSPITAL EXHIBITORS ASSN.

Subscription Price
$2.00

Vol. 8 DECEMBER, 1931 No. 12

PROSPERITY BECKONS

THE pulse of business shows a steadier beat, which hints at a recovery in economic conditions. The tide, it seems, has turned, and prosperity beckons. None other than Roger Babson, internationally famous economist, business expert and prognosticator, stakes his reputation as such upon the imminent and steady improvement of world conditions, and Canada has not been overlooked in the study upon which his statements are based. This imminent prosperity has as much significance, we believe, to hospitals, as to the "butcher, the baker and the candle-stick maker". While hospitals, on the whole, have withstood the depression with more buoyancy than many other groups, nevertheless in some instances institutions have had a hard time to make ends meet. This applies especially to the West, but conditions there show a marked improvement due to the rise in the price of wheat. And "as wheat goes, so goes Canada," an economist has observed.

The following statement was made at a recent conference held in Toronto under the auspices of the Babson Institute by Ralph B. Wilson: "I want to assure you people that Canada is not going to the dogs; neither is the United States, England or the world. Your efforts to maintain your credit and the sound position of your banks, are deserving of the highest praise. Your banks generally are in a healthy liquid position. . . ." Mr. Wilson reviewed the basic features in the economic situation, with emphasis on North American conditions, and asserted: "Another favourable factor is that, in the past year you have added approximately 100 new manufacturing firms, due to tariff changes and natural economic advantages." And the number of such continues to grow, we might add.

The suspension of the gold standard and the consequent effect on our Canadian currency was looked upon as a blessing in disguise. Mr. Wilson declaring that "Out of the temporary chaos will emerge some constructive reforms in national and international finance that have long been needed." This confrere of Babson pleaded that "we should work *with* economic laws *rather than against them.*" He drew attention to the fact that "two years ago the commodity index of basic materials stood 50 per cent above the pre-war levels. To-day it is hovering around the pre-war level. Business in general has seen its worst. The stage is being set for better business. The same group who two years ago were declaring that we were never going to have another period of depression, are to-day preaching the doctrine of continued depression. Both doctrines are detrimental to the welfare of a country."

Expressing his pleasure in coming to Toronto, Mr. Wilson stated it as his belief that the growth of Canada lies ahead rather than in the past. "The line of normal growth will be upward, probably more actively in Canada than in the United States," he declared, giving as his reason the fact that the United States has "progressed further in the exhaustion of raw materials and natural wealth," than we have in Canada. "Canada," he stated, "is fast approaching a recovery that will bring us to conditions of activity equal to those of 1928 and 1929, and which the pessimists are declaring have gone forever."

So much for what Babson and his associates believe! Let us now see in what other directions we see signs of optimism and improvement. Those who give the newspapers even a cursory glance will admit that the attitude of the press has changed radically in the last month. Their gloomy, pessimistic attitude has been discarded, and every opportunity is taken to publicize events or rumours which point to improvement in our economic status. The effect on the public consciousness can readily be appreciated. The press can, we believe, be as responsible for renewed faith in Canada's future as it undoubtedly was for the pessimism that has held us in its grip for the past year or more. The spectacular rise in the price of wheat, which, in its turn, caused commodity and stock prices to appreciate has, in no small measure, contributed to the quickening of our industrial pulse. This is easily understood, since the bulk of Canada's population is rural.

Every day brings its quota of good news, good news which spells employment for numbers of unemployed. Think what that means to hospitals in lessening the number of unpaid bills! Money raised through the National Service Loan will shortly be diverted into industry, building activities and what not. The wheels of commerce will soon be humming again, and how musical will be the sound to your ears and ours!

Hospitals are undoubtedly anticipating augmented assistance from Governmental agencies, for rumours of extensive building operations are rife. A study of recently completed institutions reveals the fact that administrators believe in the eventual thrift of quality equipment, furnishings and supplies. Proposed institutions will no doubt follow their lead. In every province there are now under way hospital building programmes of no mean

proportions. Take Ontario for instance, the government of which, in conjunction with the Dominion legislature, has promised $2,000,000 to assist in the extension of sanataria.

All things considered, we believe that the future for our hospitals is bright and encouraging. So far as our advertisers are concerned, their dealings with hospitals are in direct ratio to the degree of prosperity which these institutions enjoy. To both hospitals and advertisers then, we can wish a

"Merry Christmas and a Prosperous New Year"

Douglas Memorial Hospital Predicates New Rates

After considerable time and thought as to the question of rates, and in order to give the people of the district the best possible hospital service at the absolute minimum cost, the board of governors of the Douglas Memorial Hospital has announced a new schedule. All the rates, except those in effect for indigent patients, have been reduced to some extent.

In making the change in rates public, the board stresses the fact that the old rates were only tentative ones, set until such time as the hospital became fully established and it was seen what accommodation was most in demand.

The new schedule of rates is as follows:

Private room patients—$5 per day. Formerly $6 to $10.

Semi-private room patients (2 beds only)—$3 per day. Formerly $4.

Ward patients—$2.50 per day. Formerly $3.

Indigent patients—$1.75 per day as formerly.

These rates also apply for maternity patients.

Nursery—75 cents per day. Formerly $1.

It is interesting to note that all nurses in the hospital are graduates, no student nurses being employed; that a graduate dietitian prepares all the diets, ordinary and special; and that the public ward accommodation is very similar to the semi-private rooms found in many hospitals, with only four beds in one ward.

Average Cost Per Diem in 1930 was $3.63

The average cost of maintaining patients in Canadian hospitals was $3.63 per diem in 1930, according to a report issued by the Dominion Bureau of Statistics. This was an increase of one cent over 1929 and of $1.95 over the average for 1913. Returns received from 194 hospitals representative of the nine provinces indicate that the rates charged in these institutions were 6.9 per cent higher than the levels established in 1926, and 93.7 per cent higher than those of 1913.

The average of public ward rates was $2.04 throughout the Dominion as against $2.03 in 1929. Semi-private room rates changed slightly from $2.87 in 1929 to $2.89 in 1930. These were partially offset by a reduction in the Alberta average from $3.52 to $3.45. Private room rates averaged $5.24 for the Dominion, an increase of one cent, while average operating room charges fell from $8.37 to $8.36. Provincial averages varied between limits of $7.04 and $9.69 for Alberta and Quebec respectively.

Ontario Will Assist Sanataria to Extent of $2,000,000

The Hon. J. M. Robb, Minister of Health for Ontario, recently announced that the Province, in conjunction with the Dominion Government, has voted $2,000,000 to assist in building and extending sanataria. It was stated that the Province would contribute 17.5 per cent, the Dominion the same amount, and the additional 65 per cent would be made up by those institutions which desire to enlarge the scope of their work with the aid of the two Governments.

Gideons Will Furnish a Bible for Every Bed in Our Hospitals

For every long term prisoner in every penetentiary, for every overnight visitor in the jails, and for every bedridden or convalescent patient in every hospital the Gideons will provide a Bible. Their attention has hitherto been confined to hotels, where the Gideon Bible has become as much an institution as the guests' register.

MR. A. C. CHAPMAN,
President, New Brunswick Hospital Association, and President of the Moncton Hospital, Moncton, N.B.

Saskatchewan Association Conducts Important Business at Annual Convention

THE Saskatchewan Hospital Association held its 13th annual meeting recently in the Hotel Saskatchewan, Regina. It had been the intention of the Association to hold its convention in Moose Jaw, but due to prevailing economic conditions, it was felt that if the original plan were carried out the attendance would be seriously curtailed. As it was, the convention, usually of two-day duration, was carried to a successful conclusion in a day, with delegates present from every part of the province, each one enthusiastic and anxious to thresh out the vital problems confronting institutions in the province of Saskatchewan.

After a brief address of welcome by the Deputy Mayor of the city, the acting president of the Association, Mr. J. M. Clark, gave his presidential address, calling for co-operation, understanding and broad-mindedness in facing the trying financial problems of the present time.

MR. LEONARD SHAW, Superintendent, Moose Jaw General Hospital, Moose Jaw, Sask., and President of the Saskatchewan Hospital Association.

Immediately following his address, Mr. Clark called upon Dr. F. C. Middleton, Deputy Minister of Public Health, who presented a report of hospital activities for the year 1930. The convention was informed that in 1930 Saskatchewan had one hospital bed for every 225 people; that the use of hospitals had decreased while the use of sanataria increased; that in 1930 Saskatchewan hospitals cared for 60,168 patients in 994,287 hospital days; that one person in 14 had hospital treatment; that in 16 training schools 523 pupil nurses trained and 167 were graduated; that liability insurance was carried by 21 of the 66 hospitals in the province; that interns were employed in 9 hospitals; that maternity cases numbered 6,858; that the number of living births increased by 605; that Union hospitals handled 22 per cent of the maternity cases; that maternal deaths numbered 27 or 4.1 per cent per 1,000 living births, one per cent less than the general maternal death rate in the province. The value of hospital buildings and equipment was stated to be $9,176,453.37, with the year's earnings amounting to $3,509,122.78. The provincial grant amounted to $634,395.50, it was announced.

Following Dr. Middleton's report Dr. S. R. D. Hewitt, Superintendent of the Regina General Hospital, presented an interesting report on the American Hospital Association Convention, from which he brought back many helpful hints regarding new equipment. Dr. Hewitt urged that the Association support the Canadian Hospital Council, after explaining its function in detail. The meeting unanimously voted its support in consequence.

Dr. Seymour, recently of the Vancouver General Hospital and now of the Saskatoon City Hospital, was then called upon to conduct a round-table conference. Immediately the meeting had resolved itself into conference, delegates began to stress the urgent need of financial support for their institutions if they were to continue to function. Arising from the suggestion that the Saskatchewan government be approached for an increased grant, Dr. Hewitt brought forward the suggestion that, since drastic times need drastic remedies, the Association should seriously consider a large financial drive, probably in the form of a sweepstake. He was emphatic in his belief that if money had to be obtained for such a noble cause the method of obtaining it should be only incidental. Practically all delegates expressed their views freely throughout the conference, thereby bringing out much valuable information.

The matter of indigent patients was discussed at some length. Mr. Leonard Shaw, Superintendent of the Moose Jaw General Hospital, strongly advocated a resolution giving authority for hospitals to refuse admission to indigents who were not emergency cases until such time as authority from the municipality was forthcoming. Some delegates were of the opinion that such legislation was now in effect, but Mr. Shaw was firm in his opinion that whereas the rural municipalities were protected, unless the hospitals got their authority they were still responsible to the Department of Public Health for failing to admit a patient, and that the Department had the power to suspend the Government grant in consequence. A resolution sponsored by Mr. J. Needham of Unity was endorsed by the convention to request legislation as recommended by Mr. Shaw and that the government be approached for such valuable assistance, advice and guidance as would permit hospitals to function in the best interests of all concerned.

The convention adjourned at noon, when the delegates were entertained at luncheon by the Regina General Hospital.

The afternoon session was opened by the presentation of the annual reports of the Association by the Honorary Secretary, Mr. G. E. Patterson of Regina. Following the

(Continued on page 37)

The New St. Joseph's General Hospital at North Bay is a 90-Bed Institution

By MARY L. BURCHER, B.A.

WHEN the new St. Joseph's General Hospital at North Bay, Ontario, opened its doors to the public on Wednesday, October 7th, it introduced to the citizens of the district one of the finest institutions of its size in the province. Completely equipped throughout with the finest appliances on the market and constructed of the best building materials, it is a credit both from the standpoint of hospitalization facilities and architecture. This new 90-bed hospital is operated by the Sisters of St. Joseph, and will maintain the same standards of efficiency for which this Order's other institutions have been noteworthy.

Situated on a hill, the hospital commands a striking view of the city of North Bay and Lake Nipissing, and from its rear windows may be seen the new Ferguson Highway. No better site could have been chosen in the whole of North Bay.

The building is of steel construction and faced with No. 1 dark brown rug brick. It is 158 ft. 8 in. long and 78 ft. 8 in. wide at the basement level, while the four top storeys are 62 ft. wide, except the chapel wing. The height is 66 ft. At the rear of the main building is the heating plant and laundry.

The west end of the fifth or top floor is occupied by the operating rooms, five in number, washup and sterilizing rooms. Adjacent is a surgical service room where all solutions for use in the hospital are prepared. Complete facilities for staff physicians and surgeons is also provided. The laboratory, in charge of a Sister, is located on this floor, and is scientifically equipped. The nurses occupy the front of the eastern section of this floor, and their quarters have been made bright, airy and comfortable for their hours off duty.

The X-Ray equipment is housed in the rear of the easterly section of the top floor, with treatment rooms opposite. This equipment is completely modern. The table is of the new tilt type with all the new control features. At the eastern end of this floor there is a sunroom similar to those on the floors below, all being furnished in coloured stick reed and rattan with suitable upholstering. Everything possible has been done to make these rooms cheerful for the convalescent patient.

The fourth floor is devoted to maternity cases, and the equipment is up to the high standard set for the whole building. In addition to lights at the head of the bed, there are others set low on the walls so as not to disturb the patients at night. Most rooms have telephone connections. Private rooms are furnished with baths, toilets, medicine cabinets and clothes closets. The baths are of the built-in type. On this floor, as on others, there is a well equipped diet kitchen and a signal lighting service. The nurseries are also on this floor, there being both a day and night nursery, acoustically treated. Case rooms and sterilizing apparatus are also housed on this floor.

The third floor has 36 rooms for surgical cases. From this floor is provided a gallery entrance to the chapel, and there is also a large balcony at the western end of the hospital. This floor is also equipped with sunroom and diet kitchen.

On the second floor are the medical wards, emergency department, administrative offices and the quarters of the Mother Superior. The main entrance of the hospital is on this floor, the approach being both dignified and impressive. At the west end of this floor is the beautiful chapel which seats 100. The basement is only partly below street level. Here are found the large and efficient kitchens, staff dining room, quarters for male staff which are provided with their own bathrooms, cold storage rooms with Kelvinator equipment, main diet kitchen, the ventilating system, pupil nurses' dining room, superintendent's office, chemistry laboratory, lecture and recreation room with folding doors between, and lecture room. The morgue is also located on the ground floor and has its own entrance from the rear of the building and adjoining the ambulance entrance.

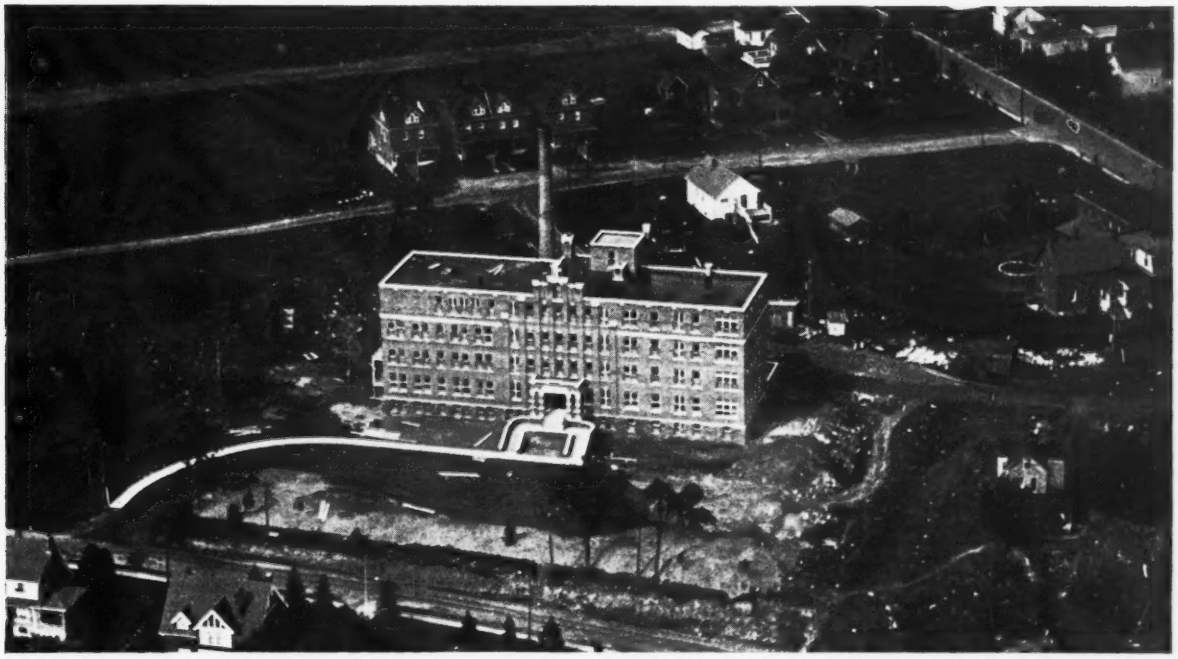
Throughout the building the floors are of terrazzo with cove corners. The floors are covered with Marboleum, a long wearing, heavy marble grained linoleum which deadens sound and is easily kept clean. The ceilings are of soundproof construction. The walls are painted in pleasing tints.

The hospital is equipped with silent and efficient elevators. Laundry chutes from each floor connect with the basement, these being fireproof. The laundry building at the rear is equipped with up-to-date machinery. The boiler room adjoins the laundry and it is here that steam heat is generated for the hospital.

So much for the layout and construction of the hospital. Now for a detailed consideration of a few of its more important departments.

The surgical suite commands a fine view of the city. The floors are of terrazzo with walls of white and green tile and special acoustically treated ceilings. The gumwood doors are finished with hooked handles under which the elbow may be placed to open doors without touching them with the hands. Small rubber pads are attached to all door frames to prevent any noise from slamming. The surgical department comprises two major operating rooms, one of which is reserved for septic and emergency cases, a specialists' room for eye, ear, nose and throat work, a sterilizing room, a surgical service room, scrub-up rooms for doctors and nurses, nurses' work room and dispensary. The rooms are located and interconnected in such a manner as assures the utmost convenience for doctors, nurses and patients.

The two major operating rooms are equipped with the latest Scanlan-Balfour operating tables. Two Operay Multibeam "twelve-beam plus" fixtures supply the needed light for the operating rooms, and should the usual power fail there are Eureka lights to take their place. Operating



The new 90-bed St. Joseph's General Hospital at North Bay, Ont., is a credit to the Sisters of St. Joseph from the standpoint of both hospitalization facilities and architecture. In the right background of this aerial photograph may be seen the new Ferguson Highway, while in the foreground is a steep slope which descends to the shores of Lake Nipissing.

room furniture includes semi-circular instrument tables, sterile tables, solution stands and instrument trays. X-Ray view boxes are provided in the operating rooms for X-Ray films, these enabling the surgeon to work with a view of the operating field before him. A call system is installed in the operating rooms so that an extra nurse may be summoned if required.

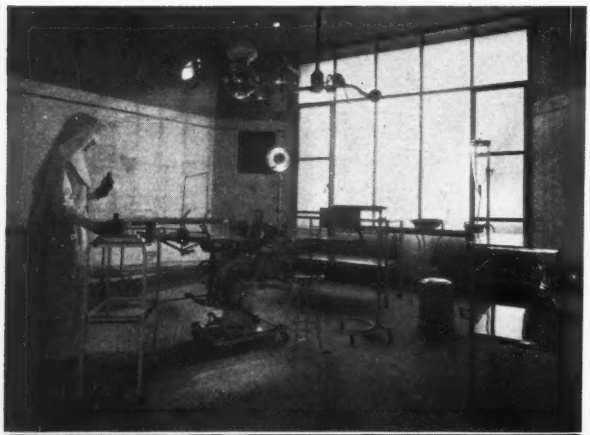
The eye, ear, nose and throat room has received special attention in the matter of furnishings. A specially constructed chair has a telescope base which permits it to be made into a table by means of foot pedals. Light is furnished by a portable Eureka light. This is fitted with opaque glass which is glareless and throws off practically no heat. Tables are all Monel-metal topped and instruments are kept in a specially designed instrument cabinet, recessed in the wall. The wash basins are all equipped with knee pedals. All the windows have specially manufactured shades which may darken the room when required. Electrical plugs are placed at various vantage points in the walls, allowing apparatus to be connected at practically any point.

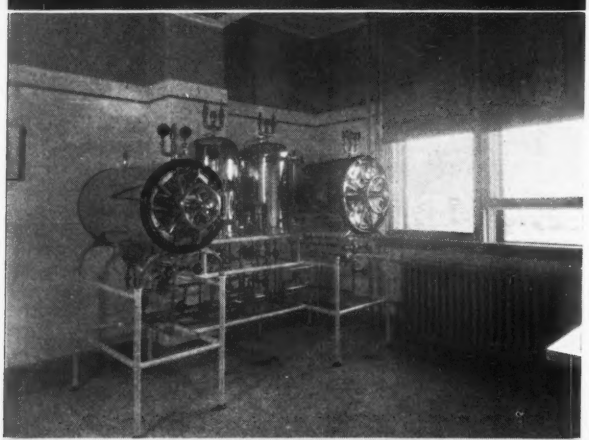
The main kitchen of the new St. Joseph's Hospital is bright and spacious, with red tiled floor and white and green tiled walls. From the ceiling are suspended electric fans which supply the kitchen with warm air in winter and cool air in summer. Adjoining the main kitchen are the pastry room, cold storage and vegetable preparing rooms. The most modern kitchen equipment on the market has been installed, this including a special stainless steel lined cereal cooker, steam cookers for vegetables, meats, desserts and other dishes, automatic dishwasher, coffee and hot water urns, etc. Telephone service with the diet kitchens on the floors above furnishes a means of ascertaining their various requirements.

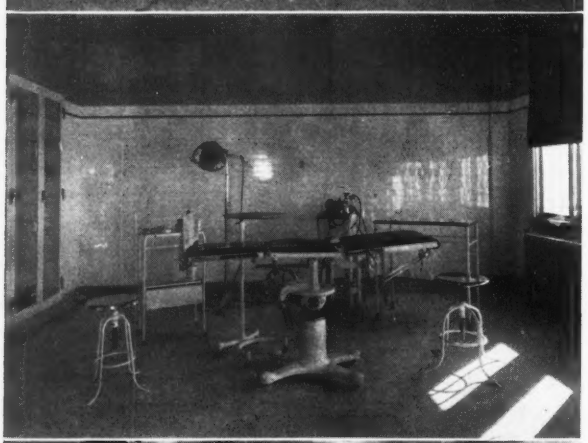
For months preceding the opening of the hospital the scene was one of much bustle with equipment, furnishings and supplies arriving constantly. The Sisters of St. Joseph chose the Hospital Division of Special Contract Department of the Robt. Simpson Co. Limited to furnish and equip their hospital throughout. This was done under the able direction of Mr. H. G. Haynes. The Contract Department is responsible for practically the entire hospital equipment, including the drapes, shades, rugs, bedroom furniture, kitchen equipment, sterilizing apparatus, operating room equipment, floor coverings, electric fixtures, instrument cabinets, office furniture and all the other items that go into the making of a thoroughly modern hospital. The result is that North Bay is the possessor of a modern, standard equipped hospital that renders an unexcelled service to patients.

The entire surgical equipment, sterilization system and operating tables are by Scanlan-Morris, the major operating room lights of Operay-Multibeam manufacture. The lighting system has been developed along lines suggested by the Sisters and planned to suit their requirements. The colour schemes were worked out with much care and forethought, these being both restful and cheerful to the patients and staff. The twelve private rooms have been made colourful with exceptionally fine Baristan domestic Oriental rugs, beautiful drapes, specially designed combination dressers and dressing tables and other Simpson specialties which have been much admired by North Bay visitors.

The new hospital is not only a tribute to the Sisters of







St. Joseph, but to Bishop Scollard who, on the 25th anniversary of his elevation to the episcopate last May, announced his intention of realizing a long cherished dream —a hospital. Within a few weeks the buildings were actually under way.

The staff of the institution comprises the following: Rev. Mother St. Philip, superintendent and administrative head; Rev. Sister Thomasina, administrative secretary; Rev. Sister St. Felicitas, superintendent of nurses; Rev. Sister St. Erma, in charge of the X-Ray Department; Rev. Sister St. Anysia, in charge of the surgical department, and Rev. Sister St. Lawrence, supervising dietitian. In addition there are a number of nursing sisters and twelve lay nurses.

The architect to whom much credit is due for the excellency of this institution is P. J. O'Gorman, A.R.I.C., of Sudbury. The general contractor was J. J. Fitzpatrick, who has built many large edifices in the north.

Dr. F. B. Mowbray of McGregor-Mowbray Clinic, Hamilton, Dies Suddenly

Stricken suddenly while performing an operation, Dr. Frederick B. Mowbray, one of the Dominion's leading surgeons, died at the Hamilton General Hospital on Wednesday, November 11th. Dr. Mowbray had little or no warning of his approaching death. On the night preceding death he experienced slight pains in his heart but paid little attention to them. At 11 o'clock on Armistice Day he suffered great pain while performing an operation, but managed to complete his work. Dr. Langrill, medical superintendent of the hospital, had him taken to a nearby room for examination. Within half an hour his death took place, angina pectoris being given as the cause.

Dr. Mowbray was a member of the surgical staff of the Hamilton General Hospital and an associate of Dr. J. G. McGregor in the McGregor-Mowbray Clinic. Dr. Mowbray was prominent in local athletic circles. He was president of the Hamilton Tigers football team this year and was interested in other sports as well.

Born near Thamesville, Dr. Mowbray graduated from the University of Toronto in 1905. For a time he was attached to the Erie County Hospital at Buffalo, later taking up practice at Palermo, Ontario. He took post-graduate work in Germany and Austria and began practising in Hamilton in 1914. Dr. Mowbray was a fellow in the American College of Surgeons and the Royal College of Surgeons of Canada, both honours testifying to his ability as a surgeon.

Owen Sound, Ont.—The presentation of the J. C. Telford Memorial Ward, fully endowed, to the Board of the Owen Sound General and Marine Hospital, was an important feature of the annual meeting of that institution.

A Hospital Commission Suggested for Manitoba

The establishment of a Manitoba Hospital Commission with wide powers and the division of the province into hospital areas along lines now in force in Alberta was recommended by the select legislative committee appointed at the last session of the legislature. Dr. F. W. Jackson, Deputy Minister of Health and Public Welfare, is now serving as secretary of this committee. It was agreed further that there should be a network of cottage hospitals and clinics to supplement the municipal hospitals. Patients would be distributed according to diagnosis and in cases of major operations and severe illness sent to the larger hospitals. It was the opinion, also, of the committee that Dominion, Provincial and Municipal authorities should co-operate in meeting the responsibility of supplying the necessary health services in preventive and curative medicine. Particularly, it was urged, that children suffering from ailments should be cared for by the state when the parents were financially unable to pay for treatment.—*Canadian Public Health Journal.*

American Dietetic Association Elects New Officers

The following were elected to office at the Cincinnati meeting of the American Dietetic Association held recently: President—Dr. Martha Koehne, University of Michigan, School of Dentistry, Ann Arbour, Michigan; President-Elect—Dr. Kate Daum, University Hospital, Iowa City, Iowa; Vice-President—Katherine M. Thoma, Michael Reese Hospital, Chicago, Illinois; Second Vice-President—Miss Annie L. Laird, University of Toronto, Toronto, Ontario; Secretary — Miss Phyllis D. Rowe, Johns Hopkins Hospital, Baltimore, Maryland; Treasurer — Miss Nelda Ross, Presbyterian Hospital, New York City.

Quite a good representation of Canadian dietitians were present at the meeting, with Toronto members leading all other Canadian centres in point of number.

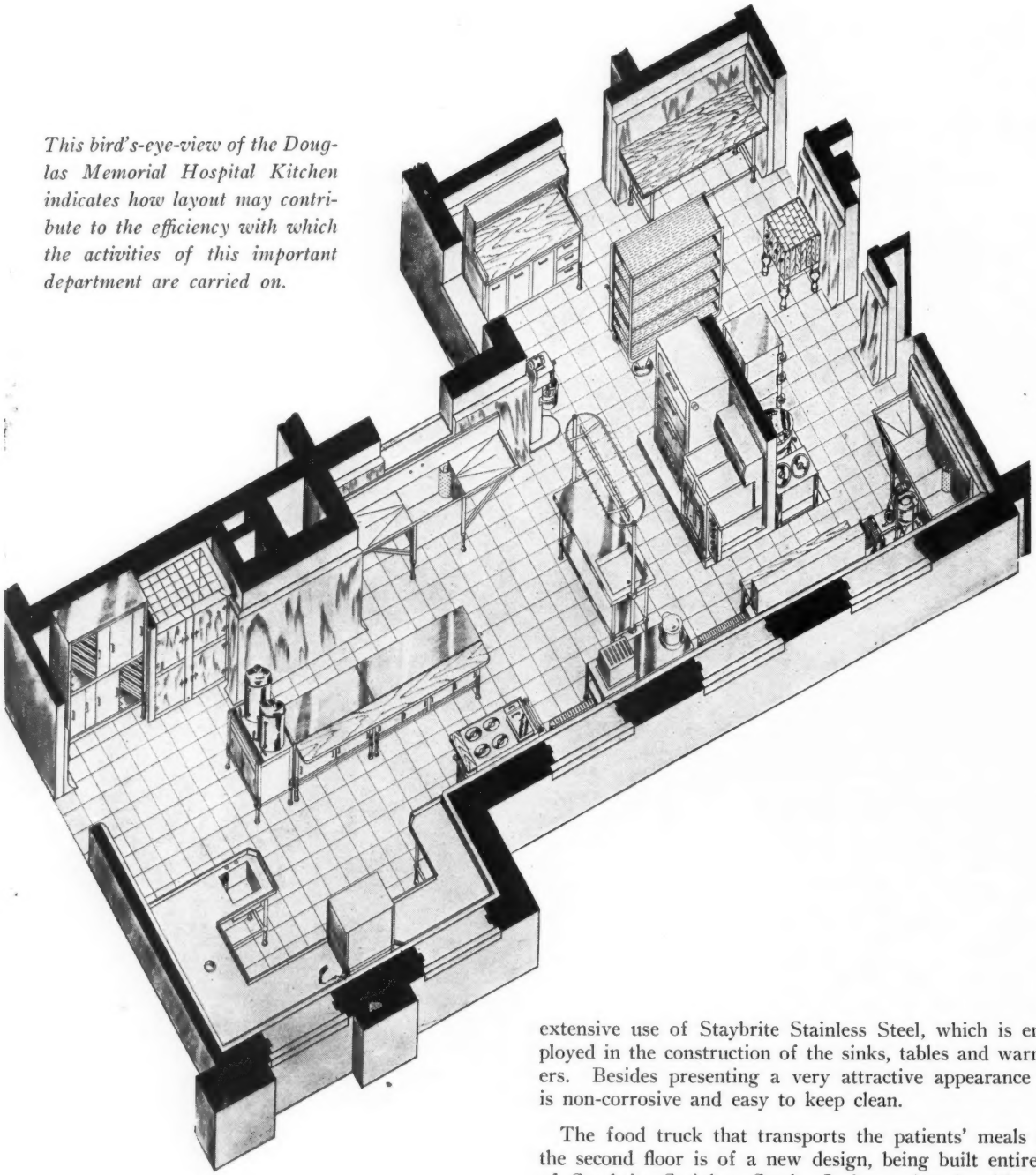
New Mellon Institute Reprint

Of interest to the dietitian and the paediatrician is an article by E. W. Schwartze, F. J. Murphy and Gerald J. Cox, entitled "The Effect of Pasteurization Upon the Vitamin C. Content of Milk in the Presence of Certain Metals," which appeared in the July issue of the Journal of Nutrition and was reprinted for distribution by the Mellon Institute of Industrial Research at Pittsburgh, Pa. Those interested may procure copies by writing the Institute.

ST. JOSEPH'S GENERAL HOSPITAL NORTH BAY

Everything possible has been done to make the patient comfortable and happy during his sojourn in the hospital, and furniture and furnishings contribute their fair share toward this end.

An Efficient Kitchen Layout



This bird's-eye-view of the Douglas Memorial Hospital Kitchen indicates how layout may contribute to the efficiency with which the activities of this important department are carried on.

THE main kitchen of the recently opened Douglas Memorial Hospital, Fort Erie, Ontario, is equipped with the most modern appliances obtainable, and has such labour saving devices as Crescent Dishwashing Machine, Hobart Mixer and Sterling Potato Peeler. A pleasing feature of this modern hospital kitchen is the extensive use of Staybrite Stainless Steel, which is employed in the construction of the sinks, tables and warmers. Besides presenting a very attractive appearance it is non-corrosive and easy to keep clean.

The food truck that transports the patients' meals to the second floor is of a new design, being built entirely of Staybrite Stainless Steel. It is equipped with an electric heating element, and is insulated on the principle of the thermos bottle, thereby assuring hot food for the patient. The Wrought Iron Range Company of Toronto are responsible for the design, manufacture and complete installation of the entire kitchen and servery equipment, this having been carried out under the supervision of Mr. A. E. Cook.

Combating Anoxemia With Oxygen Therapy

By JOHN J. BUETTNER, M.D.,
Anaesthetist

This is the second of a series of articles on Oxygen Therapy.

THE employment of oxygen as a therapeutic agent in any case where there is anoxemia, should almost be mandatory. The indications for employing it are so many and so varied, and the results have been so gratifying, that it appears strange it is not used oftener. Oxygen was discovered in 1774 by Priestly in England and Scheele in Sweden. It is known to have been used empirically almost from the time of its discovery for various ailments, and then discontinued. Shoemaker in his Materia Medica states "that while oxygen has never been accepted in the U. S. Pharmacopeia, it is a remedy of considerable therapeutic value, and as an antidote to certain forms of poisoning is indispensable to the recovery of the patient."

Inhalation therapy dates back to the remotest antiquity. It was used by Hippocrates and Galen. Volatile agents or fumes produced by combustion were chiefly employed. Gaseous agents were not used until the eighteenth century.

Appreciating the value of oxygen in general anæsthesia, and encouraged by the therapeutic results obtained by other anæsthetists, the writer investigated, then applied, and found that like many other remedies that had been advocated in the past, it was overlooked and its use not continued.

Gases have been classified in accordance to their lack or possession of irritating effect upon the air passages, as respirable or irrespirable. All pure gases if inhaled in sufficient quantity or for a sufficient period of time are toxic, due either to the exclusion of oxygen, or the action on the blood and tissues. In medicine gaseous inhalations are administered for limited periods only, and then usually diluted with atmospheric air or pure oxygen. Tissier, early in this century, in an encyclopedic article, summarized the action of oxygen as follows: "Inhaled undiluted oxygen causes subjectively a sensation of warmth in the mouth and air passages, there seems to be lightness and ease in respiration, some times in mental processes likewise. Objectively, there is acceleration of the pulse, with increased hardness, indicating a rise in blood pressure from increased force of cardiac action. Warmth of the cutaneous surface is usually observed. The visible mucous membranes, sometimes the cheeks as well are heightened in their red colour, and in case of cyanosis are restored to their normal hue. Sometimes there is increased moisture of the skin.

Respirations are usually increased in frequency at first, but subsequently the depth increases and the rate diminishes.

In small animals if the inhalation continues for a long time there will be violent mental and physical excitement with rise of temperature. Death occurs in a few hours. The viscera in these animals are found to be markedly congested.

These effects have not been noted in the human being, as the inhalations were not continued for a long period. The physiologic effects produced on man by medicinal inhalations are usually transient, but after repeated inhalations in cases of disease, certain permanent effects begin to be manifest. Appetite becomes greater and with increased ingestion of food there is consequent gain in weight."

In this same volume, Dr. Soloman Solis Cohen advocated oxygen in the treatment of pneumonia. He states "In order that it be effective in such cases, it must be used fearlessly, freely and frequently or even continuously. Nor must its use be postponed until the patient is moribund, for it will not revive the dead." The directions for its use as given by Dr. Cohen were, in mild cases, used early, inhalations for twenty minutes every two or three hours would suffice, in more severe cases every hour, and in very severe cases as nearly without cessation as circumstances permit. The oxygen chamber was advised at this time, as the most satisfactory method for treatment, but was seldom if ever available. The usual method of administration was by face mask or mouth tube.

Erroneous ideas concerning its toxicity arose, and were no doubt a prevalent factor in discouraging its use. It was commonly supposed that pure oxygen when inhaled for a short time was distinctly harmful. Experiments on healthy animals seemed to corroborate this misapprehension. In an experiment on mice it was shown that two mice placed in a tank containing 100 per cent oxygen only lived 69 hours. A rabbit was placed in an oxygen chamber of 60-70 per cent for 23 out of 24 hours, at the end of three weeks the rabbit was alive, and had gained 170 grams. The oxygen was then raised to 80 per cent, and the rabbit died in a week. These experiments prove that high percentages of oxygen under pressure are toxic to healthy animals.

Unfortunately no experimental work on animals with respiratory disease was attempted. This was no doubt due to the fallacy, that if pure oxygen were harmful to the healthy animal, it would be fatal to the animal with diseased tissues.

As a matter of fact, there is no interest in the action of oxygen on the healthy individual. There is keen interest in the action of oxygen on the individual who has inflamed tissues and is suffering from anoxemia.

Haldane has done considerable work to prove that oxygen is a valuable therapeutic agent. While investigating carbon monoxide poisoning, and other forms of oxygen deficiency, he recognized the dangers of anoxemia, especially its effect on the central nervous system, and called attention to many associated clinical conditions in which the use of oxygen would be beneficial and even life saving. He employed a portable apparatus for oxygen in-

*Read during the Ninth Annual Congress of Anæsthetists, the International Anesthesia Research Society in Joint Meeting with the Eastern Society of Anesthetists, Clinical Congress of Surgeons Week, Hotel Adelphia, Philadelphia, October 13-16, 1930. From the Department of Anesthesia, University of Syracuse Medical School, Syracuse, N.Y.

halations during the world war for the treatment of gas poisoning. There is perhaps a lack of perception of the signs of anoxemia, which may explain why oxygen is not used more frequently.

Stadie states that cyanosis of the finger tips and lips that can just be seen, represents 10 per cent oxygen desaturation, when cyanosis is definite it represents 15 per cent desaturation, and when marked it represents 20 per cent or more desaturation. He urges caution not to overlook the steel grey or ashen type of anoxemia which occurs after hemorrhage, or when there is a decrease of hemoglobin as in aenemia. Dr. P. J. Flagg, an anæsthetist of New York, recognizing the dangers of not appreciating the various stages of anoxemia, designed a Haemoxometer or Oxyhaemoglobinometer, which measures the various degrees of cyanosis or oxygen unsaturation.

Therapeutic Value

Dr. Boothby of the metabolic department of the Mayo clinic, with Dr. Haines has done considerable work in oxygen therapy. They have conclusively proven the value of oxygen as a therapeutic agent. They lament, that in spite of the well demonstrated physiologic advantages of oxygen treatment, there is so little available clinical evidence to verify its therapeutic value. The Mayo clinic in its department of medicine co-operating with its metabolic division has been able to render some valuable data concerning this method of treatment.

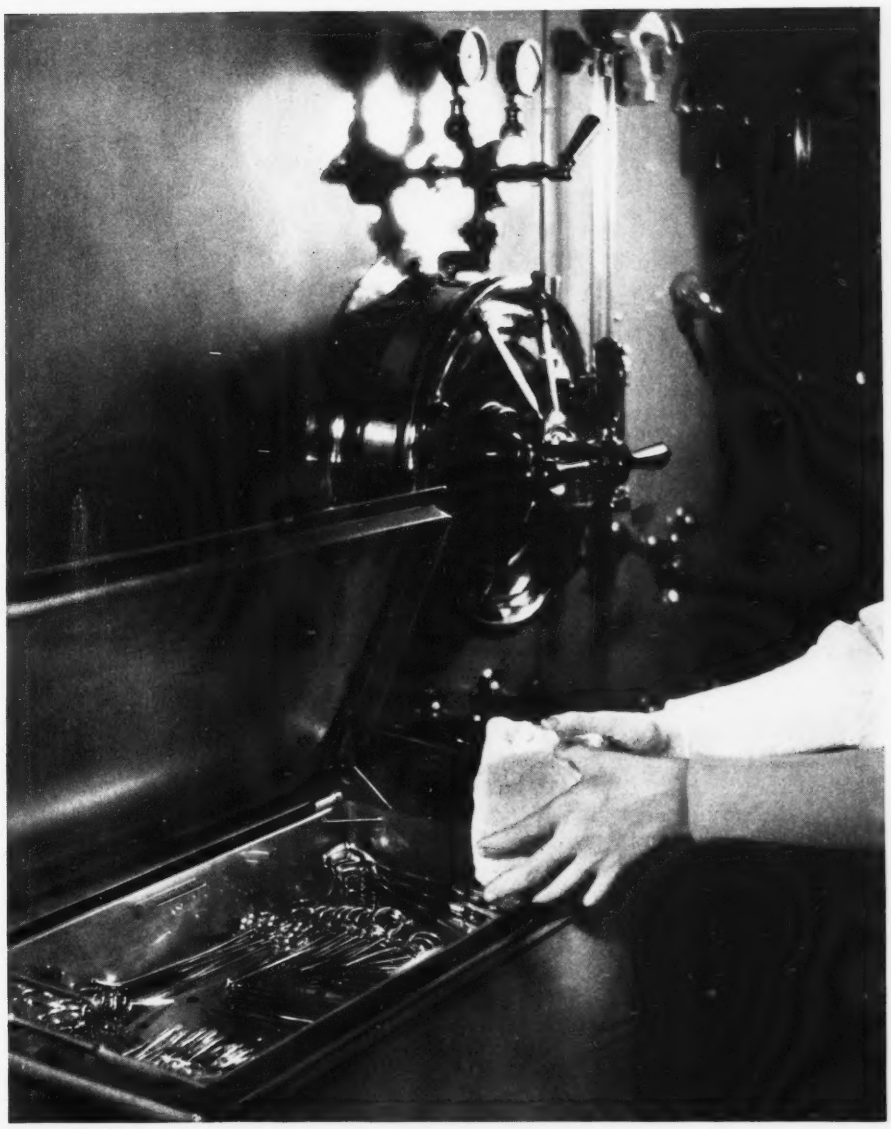
In a symposium on "Oxygen Therapy" given before the Association of American Physicians in 1927, Drs. Boothby and Haines rendered the following report: "During the past year and a half, seventy-one patients have been treated in the oxygen chamber. 39 died, 32 survived. Necropsy revealed pathologic lesions in 20 cases that oxygen therapy could not influence. Three of the 32 that lived were placed in the chamber as a prophylactic measure, to prevent an anticipated reaction. No reaction developed. The other 29 showed decided clinical improvement. In twelve of these the condition and clinical course were so severe that one can conservatively ascribe their survival to the fact that they had been placed in the oxygen chamber. Oxygen treatment is of value only in relieving the patient of the added load and danger of anoxemia, and must be continued until the cause of the anoxemia is relieved. There is no evidence that oxygen increases the patient's resistance to infection, it does, however, prevent the lowering of resistance, which occurs when the patient becomes anoxemic. Hence it is wise to start treatment at the first sign of cyanosis.

The greatest therapeutic value of oxygen is obtained in acute anoxemia as evidenced by cyanosis, as occurs in pulmonary congestion and edema, frank pneumonia, laryngeal or tracheal obstruction. Oxygen is a life saving measure in this type of case.

R. M. Wilder of the division of medicine of Mayo clinic, writes: "Oxygen was used in medicine soon after its discovery by Priestly. It was employed uncritically and injudiciously for everything, and until recently, never used in sufficient concentration to be effective even in pulmonary disease. In consequence considerable scepticism developed concerning its value, and its use was limited to moribund cases, mainly for the psychological effect on friends and relatives. Oxygen, however, never

(Continued on page 25)

"NEARLY A QUARTER CENTURY OF LEADERSHIP"



The stability of *D&G* BOILABLE *Sutures** is such that the tubes may be boiled or autoclaved any number of times without affecting the physical integrity of the sutures.

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HEAT STERILIZED

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D&G Sutures PRICE LIST FOR DOMINION OF CANADA

Kalmerid Catgut

GERMICIDAL. Exerts a bactericidal action in the suture tract. Supersedes the older unstable iodized sutures. Impregnated with the double iodine compound, potassium-mercuric-iodide.† Heat sterilized.

The boilable grade is unusually flexible for boilable catgut; the non-boilable grade is extremely flexible.

TWO VARIETIES

BOILABLE* No.		NON-BOILABLE No.
1205	PLAIN CATGUT	1405
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Sizes: 000 . . 00 . . 0 . . 1 . . 2 . . 3 . . 4

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Kalmerid Kangaroo Tendons

GERMICIDAL, being impregnated with potassium-mercuric-iodide.† Chromicized to resist absorption in fascia or in tendon for approximately thirty days. The non-boilable grade is extremely flexible.

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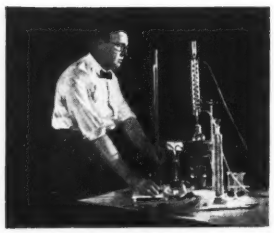
Each tube contains one tendon
Lengths vary from 12 to 20 inches

Package of 12 tubes of a size $3.60
Less 20% on gross or more or $34.56, net, a gross

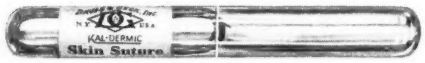


D&G Sutures are always found neutral under the most delicate titration tests. This is one of the reasons they uniformly behave well in the tissues.

Kal-dermic Skin Sutures

"IDEAL FOR DERMA-CLOSURE"

A NON-CAPILLARY, heat sterilized suture of unusual flexibility and strength. It is uniform in size, non-irritating, and of distinctive blue color. Boilable.*



No.		Inches in Tube	Dozen
550	WITHOUT NEEDLE	60	$3.60
852	WITHOUT NEEDLE	20	1.80
954	WITH ½-CURVED NEEDLE	20	3.00

Sizes: 000 (FINE) 00 (MEDIUM) 0 (COARSE)

In packages of 12 tubes of a kind and size
20% discount on one gross tubes or more

Kal-dermic Tension Sutures

IDENTICAL in all respects to Kal-dermic skin sutures but larger in size.

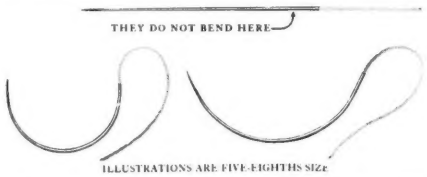
No.		Inches in Tube	Dozen
555	WITHOUT NEEDLE	60	$3.60

Sizes: 1 (FINE) 2 (MEDIUM) 3 (COARSE)

In packages of 12 tubes of a kind and size
20% discount on one gross tubes or more

Atraumatic Sutures

FOR GASTRO-INTESTINAL suturing and for all membranes where minimized suture trauma is desirable. Integrally affixed to 20-day Kalmerid catgut. Boilable.*



ILLUSTRATIONS ARE FIVE-EIGHTHS SIZE

No.		Inches in Tube	Dozen
1341	STRAIGHT NEEDLE	28	$3.60
1342	TWO STRAIGHT NEEDLES	36	4.20
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Sizes: 00 . . 0 . . 1

In packages of 12 tubes of a kind and size
20% discount on one gross tubes or more

DAVIS & GECK, INC. ▿ 217 DUFFIELD ST. ▿ BROOKLYN, N.Y.

D&G Sutures are obtainable from responsible dealers everywhere; or direct, postpaid

Unabsorbable Sutures

NO.		INCHES IN TUBE	SIZES
350	CELLULOID-LINEN	60	000, 00, 0
360	HORSEHAIR	168	00
390	WHITE SILKWORM GUT	84	00, 0, 1
400	BLACK SILKWORM GUT	84	00, 0, 1
450	WHITE TWISTED SILK	60	000 TO 3
460	BLACK TWISTED SILK	60	000, 0, 2
480	WHITE BRAIDED SILK	60	00, 0, 2, 4
490	BLACK BRAIDED SILK	60	00, 1, 4

BOILABLE

Package of 12 tubes of a size.....$3.60
Less 20% on gross or more or $34.56, net, a gross

Short Sutures for Minor Surgery

NO.		INCHES IN TUBE	SIZES
802	PLAIN KALMERID CATGUT	20	00, 0, 1, 2, 3
812	10-DAY KALMERID "	20	00, 0, 1, 2, 3
822	20-DAY KALMERID "	20	00, 0, 1, 2, 3
862	HORSEHAIR	56	00
872	WHITE SILKWORM GUT	28	0
882	WHITE TWISTED SILK	20	000, 0, 2
892	UMBILICAL TAPE	24	⅛-IN. WIDE

BOILABLE

Package of 12 tubes of a size.....$1.80
Less 20% on gross or more or $17.28, net, a gross

Emergency Sutures with Needles

UNIVERSAL NEEDLE FOR SKIN, MUSCLE, OR TENDON

NO.		INCHES IN TUBE	SIZES
904	PLAIN KALMERID CATGUT	20	00, 0, 1, 2, 3
914	10-DAY KALMERID "	20	00, 0, 1, 2, 3
924	20-DAY KALMERID "	20	00, 0, 1, 2, 3
964	HORSEHAIR	56	00
974	WHITE SILKWORM GUT	28	0
984	WHITE TWISTED SILK	20	000, 0, 2

BOILABLE

Package of 12 tubes of a size.....$3.00
Less 20% on gross or more or $28.80, net, a gross

The ash of D&G Sutures is assayed to make sure that no traces remain of uncombined chromium nor of other residues of the chromicizing process.

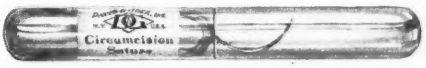
Obstetrical Sutures

FOR immediate repair of perineal lacerations. A 28-inch suture of 40-day Kalmerid germicidal catgut, size 3, threaded on a large full-curved needle. Boilable.*

No. 650. Package of 12 tubes.....$4.20
Less 20% on gross or more or $40.32, net, a gross

Circumcision Sutures

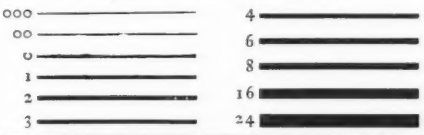
A 28-INCH suture of Kalmerid germicidal catgut, plain, size 00, threaded on a small full-curved needle. Boilable.*



No. 600. Package of 12 tubes.....$3.60
Less 20% on gross or more or $34.56, net, a gross

Universal Suture Sizes

All sutures are gauged by the standard catgut sizes as here shown



*These tubes not only may be boiled but even may be autoclaved up to 30 pounds pressure, any number of times, without impairment of the sutures.

†Potassium-mercuric-iodide is the ideal bactericide for the preparation of germicidal sutures. It has a phenol coefficient of at least 1100; it is not precipitated by serum or other proteins; it is chemically stable—unlike iodine it does not break down under light and heat; it interferes in no way with the absorption of the sutures, and in the proportions used is free from irritating action on tissues.

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SUTURES IN ANCIENT SURGERY

PIERRE FRANCO gleaned his early education from itinerant herniotomists, lithotomists, and operators on cataract. From this humble beginning he became one of the most skillful surgeons and foremost authors of the sixteenth century. His greatest contribution to surgery was modification of the operation for bilateral hernia—which up to then had amounted to bilateral castration—through the introduction of an original procedure not unlike the modern operation, except that there was no suture of the muscular layers and aponeurosis.

(Continued from page 20)

lost its effect on the imagination of the laity, even though it was discredited by the medical profession."

Oxygen Therapy in Pneumonia

Appreciating that high concentrations of oxygen were necessary to be of any value, Wilder used the oxygen treatment on several cases of postoperative pneumonia. He was impressed with the results obtained. When Wilder first started the oxygen treatment in these cases he planned taking all the patients with pulmonary complications from one of the surgical divisions for oxygen treatment, and to let the other surgical divisions treat their cases in the former routine way. The results of the oxygen treatment were so outstanding, that the other divisions asked for the same treatment for their patients. Thus no comparison could be made, but the value of oxygen as a therapeutic agent was firmly established.

Carl Binger claims we are at the crest of a wave of enthusiasm regarding the therapeutic properties of oxygen.

He summarizes his article as follows:

1. There is physiologic evidence that oxygen want may be deleterious, and if not relieved, catastrophic.

2. There is clinical evidence that oxygen want occurring in diseases, especially lobar pneumonia, may be of a grade even more severe than that occurring at high altitudes, which we know gives rise to serious symptoms.

3. Oxygen administration, if used in sufficient concentration, may relieve oxygen want.

4. That only in so far as oxygen can relieve oxygen want is it to be regarded as a useful drug.

A. L. Barach also bespeaks the early use of oxygen if it is to be of any service in the treatment of pneumonia. He says: "When a patient becomes cyanotic during the course of lobar pneumonia it generally signifies the onset of an advance in consolidation, beginning edema of the lungs or cardiac failure. If treatment is begun at this time little improvement may be observed while the pathologic process is progressing. Nevertheless, even in these cases the inhalation of 40 per cent to 50 per cent oxygen may prevent functional failure of the lungs. In a group of eight cases of this kind, five died. Prolongation of life in the desperately ill, may thus only infrequently end in recovery. The mortality of oxygen treated patients will depend as it does in other types of treatment of pneumonia, on the selection of the cases. We believe that sufficient evidence has been gathered for stating that in some cases the inhalation of oxygen prolongs life, and in a certain number of cases it appears to be a life-saving measure.

These data all stress the fact that to be of service oxygen must be used early, and in high concentration and long enough to overcome all existing anoxemia. Davies and Gilchrist of England conclude an article on the use of oxygen thus: "In conclusion we would plead for more extensive use of oxygen in an efficient and quantitative manner, particularly in pneumonia and especially in the early stages of the disease. If anoxemia be left unrelieved for more than a very few hours, the results of oxygen therapy are frequently disappointing. Cyanosis should be forestalled and abolished by oxygen as soon as it becomes apparent. There is considerable clinical evi-

(Continued on next page)

(Continued from preceding page) ....

dence that if this were done the mortality of pneumonia could be reduced, the severity of the symptoms markedly lessened, and a speedier termination of the infectious process assured."

Combating Anoxemia

Paul Roth extols the virtue of oxygen. He says "Oxygen therapy is indicated primarily for the relief of anoxemia, and the various disturbances to which it leads. The seriousness of the effects of oxygen want has been appreciated only in recent years, and the clinician in general, still needs to be awakened to the advantage and effectiveness of the more modern and improved methods of oxygen administration. The surprisingly slow progress made in the therapeutic uses of oxygen from which so much has been justly expected ever since the element was discovered, is due, as was well stated by Haldane, to (1) Failure to understand both the immediate and remote effects of oxygen want, (2) Failure to appreciate that the longer the period of oxygen want lasts, the greater is the progressive damage done to the central nervous system, heart, and other organs, and the slower and more difficult does recovery become. A deficient oxygen supply to the body if allowed to continue, is undoubtedly a matter of very serious moment to a patient, and should be prevented if this is at all possible. Anoxemia is not only dangerous and absorption of food which is essential to recovery.

4. The fear of using high percentages of oxygen in pneumonia is unfounded as shown by the experiences recorded in this series of cases.

but its injurious effects may soon become irreparable, though the anoxemia may have been effectively corrected."

He further adds it is safe to predict that oxygen therapy properly conducted in its legitimate field of usefulness will save more lives than resuscitation apparatus have or ever will in emergency work. John H. Evans of the value of oxygen therapy, as follows:—

summarizes his experiences and shows convincing reports

1. Oxygen is effective in the treatment of pneumonia, when its use is begun early in the disease, and is given in concentration high enough to overcome any arterial unsaturation of the blood.

2. As the mortality in pneumonia is generally due to the combined harmful effects of infection and anoxemia which result in exhaustion and circulatory failure, the proper administration of oxygen will remove at least one of these causes of death, viz:—Anoxemia, and thus give the patient a better chance of recovery.

3. As anoxemia of the intestinal tract produces distention and practically stops digestive processes, the use of oxygen will remove this factor and allow the digestion

Boothby and Haines report the use of oxygen following thyroidectomy. It was used in all cases having severe reactions, especially those with cyanosis, resulting from pulmonary edema, broncho-pneumonia, laryngeal and tracheal obstruction. The patients showed subjective improvement. Fever usually subsided rapidly, pulse and respiratory rates were lowered, dyspnoea was partially or completely relieved. It is probable that the development of pneumonia was prevented in many cases. The observations suggest that not infrequently death may be prevented by efficient oxygen treatment in suitable cases.

Judd and Passalacqua report that the use of oxygen in the treatment of anoxemia and of the pulmonary conditions which produce oxygen unsaturation of the blood has a physiologic basis which is well grounded. In 180 unselected cases oxygen was administered under one of the three sets of circumstances:

First, As a prophylactic measure against pneumonia immediately after the operation. *Second,* as soon as signs and symptoms of pulmonary congestion were recognized clinically; *Third,* after the classical signs of pneumonia were present.

In the first group were one hundred and five patients among whom pneumonia did not occur. Similar results were noted in forty-three cases with pulmonary congestion. In the third group of thirty-two patients with pneumonia not one casualty was recorded and the progress of the disease was apparently influenced by the use of oxygen.

Thus far the use of oxygen has been mentioned chiefly in the treatment of pulmonary disease. It is also valuable in treating cardiac disease associated with decompensation. There is a relief of dyspnoea, promotion of sleep, improvement of appetite and decrease of edema.

Robert Rizer working on the theory that the pain in coronary occlusion is due to anoxemia of the heart muscle used oxygen and obtained relief from pain two minutes after the patient had been placed in an oxygen tent.

Lotheisen stresses the value of oxygen in pulmonary embolism. In some cases artificial respiration and cardiac massage were needed in conjunction with the oxygen.

C. Weinstein and H. E. Weinstein have reported excellent results in the treatment of diabetes. They report lowering of the specific gravity of the urine, diminished

(Continued on page 36)

Selecting Food Service Equipment for the Modern Hospital

PART III

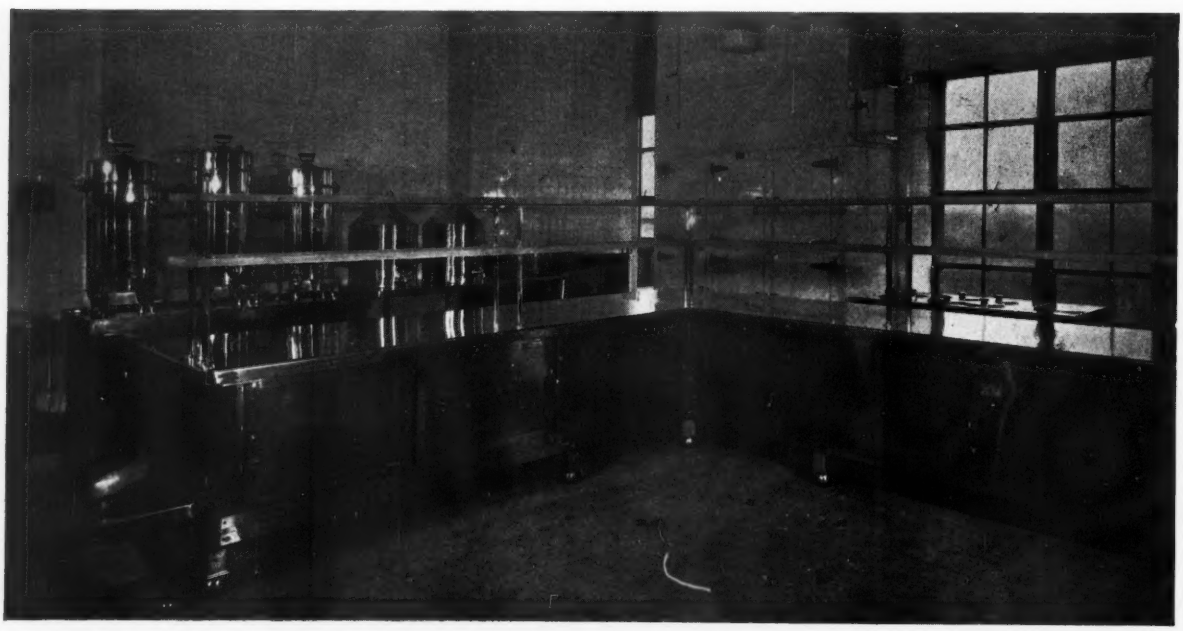
How an Intelligent Analysis of Materials and Construction Insures Food Service Equipment Value

By JOHN G. NEAR, Toronto

IN the previous articles of this series in the August and November issues of The Canadian Hospital, we outlined a method for determining the grade of equipment that will prove most economical in service. The method of selecting the proper grade of equipment was the result of a careful survey made of kitchen equipment performance. This survey showed, in practically every case, that equipment with the lowest first cost is rarely cheapest in the long run. It further demonstrated that equipment made of the quality metals, the white nickel alloys, of which Monel Metal is the most commonly used, is most economical from every point of view. Having determined the grade of equipment to be used, the next task is the preparation of specifications.

How many hospital buyers, in selecting the manufacturer to build their equipment, have been faced by the dilemma of prices varying by as much as 25% on the one hand and the possibilities of cheapened construction on the other? There are two possible causes of this situation. It is possible that all competitors for your order may be figuring on the same grade of equipment. In this case, someone may be trying to make an unusually large profit on your business, which would account for the high price. On the other hand, one of the manufacturers may be willing to take your order at a loss just to keep his shop busy, which would account for the low price. This low price might also be due to a mistake in figuring costs. Then, too, the difference between the various figures might be due to differences in manufacturing costs. All these are possibilities, but in the present highly developed condition of the equipment industry, they are unlikely to be the causes of the wide range in prices. What is more likely to be the cause of these differences is that all the houses *are not* bidding on the same grade of equipment: No two manufacturers are exactly alike in their methods of construction. However, all reputable manufacturers endeavour to furnish a substantial grade of equipment and their costs will not vary greatly. But you will nearly always find at least one house that will try to get your order on the basis of price alone. This type of house will nearly always interpret the specifications as much in favour of cheapened construction as circumstances will permit. Nearly always you will find that cheapened initial cost of construction ultimately results in lower value and increased maintenance costs.

"But," you may object, "is it possible that there can be such a big difference in costs if all manufacturers are quoting on one specification?" Unfortunately it is possible. All too often specifications are not definite upon the important points of construction. To show you just



Of all Monel Metal construction, this equipment is attractive and durable. It is easy to keep clean and will withstand the most severe service. It represents the greatest service you can get for your equipment dollar.

how much difference is possible, let us glance at a typical fixture. Take a combination cook's table, steam table, and warmer as an example. Two manufacturers might offer you two different fixtures of this type. To all appearances they would both meet your specifications. Yet there are at least fifteen important details of construction on which they might differ. These differences might be sufficient to make at least twenty-five percent difference in the cost of the fixture and could easily determine the difference between a fixture that was completely satisfactory and one that is altogether unsatisfactory. You ask, "How can I guard against this lowering of the quality of equipment I buy?" *First,* you must learn enough about the design and construction of equipment and the materials used to appreciate the real value of good equipment. *Second,* you must see that your specifications are perfectly clear on the important details of construction. And, *third,* you must make a personal examination of the merchandise offered by various manufacturers, comparing the major details of materials and construction before you make an attempt to judge the prices submitted to you. It is not reasonable that you, as a hospital executive, should become a kitchen equipment expert, but when you buy an electric refrigerator for your home, an automobile or a radio, you try to learn all you can concerning the merits of the respective makes offered to you. The same thing should apply when you buy kitchen equipment for your hospital.

Briefly the main points upon which sanitation, low upkeep, durability and general desirability depend are:—(1) the general type of construction; (2) the materials used; (3) the workmanship and finish. Space does not permit us to discuss these factors in a complete way. However, a few words will be devoted to some of the most important points of construction in order to indicate a method of analyzing the products offered to you.

The Construction of Cabinets, Warmers and Similar Service Equipment

There are two general methods of construction for equipment of this type:—(1) angle-iron framework with panels of sheet metal; (2) body made entirely of sheet metal without any framework. The latter type requires the use of rather heavy metal to insure its strength. When galvanized steel or any of the other cheaper metals are used this does not materially affect the cost. The sheet metal type of construction is not economical for use with the more expensive quality alloy metals because of the heavy gauges necessary. The frame construction which is nearly always used with alloy metals offers many possibilities for variations in workmanship. The accuracy and thoroughness of the workmanship and the fastening of the corners and joints are very important. Careful inspection, particularly of the interior, will reveal evidence of care in construction, of the presence or absence of necessary reinforcing members.

Cook's Table Tops, Dishwarmer Tops, etc.

As we have previously shown in our survey Monel Metal or some similar white nickel alloy is the most suitable material for the tops of tables, dish-warmers and similar units. Due to the higher cost of these alloy metal tops compared to those of steel, there is a tendency to use lighter gauges. This is satisfactory if done with due regard for the size of the top and the support it is given

from below. For tops in which the unsupported area is relatively small 15 gauge metal will be suitable. Where the unsupported area is considerable, nothing less than 13 gauge should be used. As regards workmanship, here are a few typical things for you to look for: are table corners welded solid and ground to give a smooth, rounded edge, or are they carelessly made, with soldering substituted for welding? Is the top smooth and flat with all joints tightly welded and ground flush so that there are no crevices to collect dirt and grease? Are openings for steam table insets or bain marie pans carefully made with no unnecessary projections? Are the joints about openings tight and smooth? Are the insets strongly mounted and fastened with adequate braces?

Vegetable and Pot Sinks

Welded sinks, in which all joints are tightly welded into one piece construction with no overlapping of edges, are greatly superior to those of rivetted construction. In the latter, seams or joints are fastened together by rivets, making it necessary to overlap the metal, leaving raw edges at several points. If this type of construction is to be sanitary and watertight, solder must be flowed into the seams and corners. When made of steel, rivetted sinks are nearly always of galvanized sheets. The galvanizing peels off wherever sharp bends are made and the raw edges are left unprotected against rust. If steel must be used at all, it is preferable that the sink be of welded construction, *galvanized after fabrication.* However, as we have shown in the previous parts of our survey, galvanized sinks are poor economy. Alloy metal sinks are far superior and more than pay for themselves in the end. While sinks made of Monel Metal or similar quality alloys can be of rivetted construction, it seems logical to use only the best type of workmanship with such good materials. Consequently you will do well to specify welded construction for such sinks. The question of gauges is also of considerable importance. Nothing lighter than 14 gauge (U.S.S. Standard) should be used for single compartment sinks with bowls up to 42″ x 24″ and for double compartment sinks up to 60″ x 24″. For larger sizes at least 12 gauge is recommended. In sinks of the finest grade of construction, metal of 10 and 12 gauge is generally used.

Dish Tables

The general remarks concerning table tops apply here as well. All joints should be butted together and joined to an underpiece, the joint then being filled and ground smooth. Welded construction is better than rivetting. The table should be strongly braced and mounted on a heavy pipe-leg stand adequately braced. The rim will preferably be of channel construction, similar to that used for rims of sinks. For tables of moderate size 14 to 15 gauge will be used, while larger tables will be of 12 or 13 gauge. You will find that tables of the finest construction are as heavy as 10 gauge.

Details of Construction

There are many little details of construction that go to make the difference between satisfactory and unsatisfactory equipment. For example, trim is not often given the attention it deserves. Nickel-plated steel trim is often used. As a matter of fact, plain steel is more desirable. If it starts to rust it can be polished with very little trouble. On the other hand, if the plating wears off the nickelled trim, it must be removed, ground down and replated. Nickel-plated trim is not a great deal cheaper than Monel Metal and its use is a pretty good sign of poor workmanship. A first-class fixture deserves first-class trim and Monel Metal should be specified. There are two ways of applying Monel Metal trim. It may be made of light gauge metal wrapped over steel strips, or it can be of solid Monel Metal. The former is not materially less costly than the solid Monel Metal trim, and the latter is certainly best.

Shelving in warmers, cabinets, etc., is another detail that should not be overlooked. Well-made equipment will have removable perforated shelves with the edges turned down on all sides and the corners welded. Sharp edges of the metal will be turned under and the shelf will be mounted on a strong angle frame which gives additional reinforcement to the body. It is cheaper to install shelves if sheet metal, unperforated and rivetted to the sides of the unit is used, but from every point of view this is decidedly inferior to the construction we have outlined.

The manufacturer can also save money by extending the angle corners of fixtures below the base of the units to form legs, but this does not give a good appearance, nor is it strong. Heavy cast legs of alloy metal—say 20% Nickel-Silver, are more attractive and practical, although they may add a trifle to the cost.

Hospital Aid News

On the occasion of the presentation of Life Memberships in the Ontario Hospital Aids Association to Mrs. F. D. Reville and Miss M. Coulter, a representative group was entertained at the Nurses' Home, Brantford General Hospital, by Miss M. McKee, Superintendent. The President of the United Aids, Mrs. O. W. Rhynas, Burlington, who presented the memberships, paid warm tribute to the work of Mrs. Reville during the early days of organization and to Miss Coulter for her faithful services on the Advisory Committee. Members of the Hospital Board, President of the Local Aid and Provincial Officers were present. At the November meeting of the Brantford Hospital Aid, Mrs. Whitely, who has served nineteen years in the sewing room was presented with a beautiful purse. A jelly and jam shower held by the W. H. A. members provided a goodly supply for the use of the Hospital.

* * * *

The W. A. to the Alexandra Hospital, Ingersoll, at its annual meeting reported encouraging progress in connection with the proposed nurses' home. Mrs. Verne Meek was elected president, and Mrs. Harold Hall, secretary.

* * * *

At the annual meeting of the Goderich auxiliary Mrs. W. L. Horton was elected president and Miss Etta Saults, secretary. A successful year's work was reported. The sum of $811.51 was raised and a generous contribution made towards the purchase of Vita glass for the sun room

windows. New floor coverings for the men's and women's wards were purchased. A report of the Ontario convention was given by Mrs. Horton.

* * * *

Mrs. John R. Shaw was elected president of the W. A. to the Woodstock Hospital Trust at its recent annual meeting. The secretary is Mrs. J. B. Jupp.

* * * *

A representative gathering of Stratford and Perth County citizens gathered at the Nurses' Residence of the General Hospital, Stratford, for the presentation of a life membership in the United Hospital Aids Association of Ontario to Mrs. Thomas Ballantye, its first secretary. The Provincial president, Mrs. O. W. Rhynas, of Burlington, made the presentation and expressed appreciation of the work done by the recipient at the time and since the inception of the provincial organization, and admiration of her many sterling qualities in other lines of benevolent public service. Other addresses of a congratulatory nature were given by Rev. Dr. G. P. Duncan, Mrs. C. L. Grant, president of the Women's H. A., Mayor Moore, D. M. Wright, M.P., Dr. D. Smith, Mr. Dickson, warden of the County of Perth, and a number of messages of felicitations were received. Bouquets were presented to Mrs. Ballantye and to Mrs. Rhynas, and tea was served afterwards in the lecture room. Mrs. Ballantye's son, Dr. T. Ballantye, Mrs. Ballantye and daughter, Betty, and Mrs. J. G. Karn of Woodstock, were among those present.

* * * *

A successful bazaar was held in November 21st by the W. A. of the Louise Marshall Hospital, Mount Forest. At its recent annual meeting Miss Grace Wright, who was elected a member of the Advisory Committee of the Provincial organization at the September convention, was re-elected president, and Miss May Conner, secretary. The response to the annual appeal made for fruit, jellies, and pickles for the Louise Marshall Hospital, Mount Forest, was gratifying to the Superintendent, Miss R. J. Robinson and to the Women's Hospital Aid who were in charge of the collection. Seven cars canvassed the town, and, in spite of the rain, the work was nearly completed in the forenoon, and about three hundred quarts added to the list of preserved fruits and vegetables in pickled form. The jellies and jams were particularly appreciated.

Mr. Colin Drever Architect for Hotel Dieu, Kingston

We are very sorry that in our account of the new addition to the Hotel Dieu, Kingston, which appeared in the November issue of The Canadian Hospital Journal, we should have made no reference to Colin Drever, Kingston architect, to whom the Sisters are much indebted for the close co-operation accorded their project. Hospital administrators at whose institutions building operations have at some time been carried out, realize only too well of how much assistance the architect can be to them.

News of Hospitals and Staffs

A Condensed Monthly Summary of Hospital Activities, and Personal News of Hospital Workers

Editor's Note: Contributions of items for publication in this department will be gladly received. Please Address, The Canadian Hospital, 177 Jarvis Street, Toronto.

BATHURST, N. B.—Work on the new sanatorium at Bathurst is progressing rapidly. The reinforced concrete frame is already completed up to the roof. It is built of Bathurst granite and light buff citadel pressed brick. The hospital will accommodate 100 patients.

* * *

BROCKVILLE, ONT.—After 25 years of active service in provincial institutions, Dr. Walter M. English, for the past 4 years in charge of the Ontario Hospital at Brockville, has retired, and is succeeded by Dr. Donald R. Fletcher, who has been acting as inspector of Mental Hospitals for the past year.

* * *

CHALLOTTETOWN, P.E.I.—The first sod for the new Prince Edward Island Hospital was turned on November 2nd.

* * *

CLAIR, N.B.—A fire of unknown origin destroyed the Clair Hospital and the residence of Dr. LaPorte, its proprietor, on November 1st, the damage being estimated at about $20,000. The hospital was fortunately empty at the time.

* * *

DUNCAN, B.C.—The King's Daughters' Hospital has been handed over by the King's Daughters to the Cowichan District Hospital Association.

* * *

FREEPORT, ONT.—At a special meeting of the finance committee it was decided to approve the proposal of the Waterloo County Health Association to construct an addition to the present pavilion at the Freeport Sanatorium at a cost of $100,000. Thirty-five per cent of the cost will be provided by the provincial and federal governments and the balance is to be guaranteed by debentures issued proportionately by Kitchener, Galt and Waterloo County.

* * *

HAMILTON, ONT.—This city will soon have a hospital for incurables. St. Peter's infirmary, to which a 23-bed wing is being constructed, will assume that status when the new wing is completed. The institution will be recognized as a hospital and equipped as such, patients to be chronic cases only.

* * *

HENSALL, ONT.—Dr. Moir of Hensall has recently opened an up-to-date sanatorium about a mile south of the town, which is known as the Huron Springs Sanatorium. It will be used primarily for radium treatments, in which Dr. Moir has specialized for the last 10 years. Medical cases will also be accommodated in the hospital, but must be treated by the local doctor. In all, there is accommodation for about 22 patients. The rates are said to range from $15 to $25 per week, including nursing care.

* * *

LONDON, ONT.—According to a recent announcement of Hon. Dr. Robb, Minister of Public Health, London is to have a radio-therapeutic centre as part of the Provincial Government's plan to combat cancer, providing that satisfactory hospital arrangements can be made. Dr. Robb is reported in the press as saying that "One of the finest ideas in the world for combatting cancer is being developed at the cancer clinic at Victoria Hospital. When it is published it will set the medical world agog."

LONDON, ONT.—A building programme for the Queen Alexandra Sanatorium was announced recently by the London Health Association, this to include a 150-bed pavilion north of the reception hospital and to be connected with it by a tunnel, an addition to the central heating plant and laundry, renovations to the reception hospital, and an addition to the nurses' residence.

* * *

MONTREAL, P.Q.—A bond issue of $150,000 to provide for the erection of a new wing to the Ste. Justine Hospital has been authorized.

* * *

MONTREAL, P.Q.—In the presence of a distinguished audience the first sod for the new Montreal Convalescent Home was turned recently. This new structure will cost in the neighbourhood of $300,000.

* * *

MONTREAL, P.Q.—Dr. Omer Noel is the newly appointed superintendent of the St. Jean de Dieu Hospital, in succession to Dr. F. E. Devlin, who is retiring. Dr. Rodolphe Richard has been appointed assistant to Dr. Noel.

* * *

MONTREAL, P.Q.—The Verdun General Hospital was opened to the public early in December. The structure cost in the neighbourhood of $1,500,000, and will serve as clinical quarters for the municipality for the next 20 years by reason of a contract signed by the hospital authorities and the civic officials.

* * *

MONTREAL, P.Q.—With a grant from the Provincial Government and such funds as may be realized from a campaign for funds, sufficient money should be raised by the Hebrew Consumptive Aid Association to build a 50-bed hospital for incurables at a cost of $200,000. The city has given a grant of 878,340 square feet of land as a site.

* * *

MONTREAL, P.Q.—A delegation representing the proposed Montreal Post Graduate Hospital waited on the Executive Committee of the City Council a few weeks ago to ask for a grant of land. A sum of $500,000 from the Provincial Government is contingent upon the Hospital receiving this grant. The proposed institution will be operated by the Sisters of Providence.

* * *

MONTREAL, P.Q.—It has been agreed by the St. Luc Hospital Corporation and the City of Montreal that the former will build a hospital for the treatment of contagious diseases with a capacity of 300 beds, the city agreeing to guarantee the bonds to be issued to the extent of $1,500,000, to pay interest and amortization charges, with the understanding that at the end of 25 years Montreal will become the sole owner of the new institution. The hospital will receive a fee of $3.30 a day for the patients sent to it by the city.

ORILLIA, ONT.—The Orillia Soldiers' Memorial Hospital has recently been equipped with an X-Ray Department, the equipment being thoroughly up-to-date.

* * *

ORILLIA, ONT.—The formal opening of the new Nurses' Residence and dormitory for boys took place at the Ontario Hospital on November 8th in the presence of a group of Cabinet Ministers. The new additions are thoroughly modern in design and well though not extravagantly furnished and fitted. The two buildings are connected by a tunnel and a covered passageway connects the dormitory with the main building. The dormitory will house boys between the ages of six and sixteen, of whom it will accommodate 144.

* * *

PENETANGUISHENE, ONT.—Fire of an unknown origin claimed nine lives at the Ontario Hospital on November 2nd. Fire broke out in Cottage A at 5 o'clock in the morning. This cottage housed 42 chronic male cases.

* * *

PORTAGE LA PRAIRIE, MAN.—The new wing of the Portage La Prairie General Hospital was officially opened on November 3rd, on which occasion Dr. Montgomery, Minister of Health, was the speaker. In addition to providing more accommodation, the new wing permits the better arrangement of services, thereby facilitating the work of the staff.

* * *

REGINA, SASK.—Dr. S. R. D. Hewitt, Superintendent of the Regina General Hospital since April, 1929, has presented his resignation to the Board of Governors of the hospital, who have accepted it. Dr. Hewitt is leaving Regina to assume the superintendency of the newly completed Saint John Public General Hospital, Saint John, N.B. Dr. Hewitt was formerly a D.S.C.R. official in Toronto and one of its most prominent medical men.

* * *

TORONTO, ONT.—The first sod for the Nurses' Residence of the Home for Incurable Children was turned about two months ago, this being situated some 75 feet north of the west wing of the main building and overlooking the beautiful Rosedale Ravine.

* * *

TORONTO, ONT.—The Toronto East General Hospital has recently installed new Victor X-Ray equipment capable of doing all forms of diagnostic, superficial and intermediate therapy. Dr. A. R. McGee, formerly associate roentgenologist of the Henry Ford General Hospital, Detroit, has been appointed radiologist in charge of this department.

* * *

TORONTO, ONT.—Dr. Richard Smith Conboy, well known Toronto physician, died suddenly on October 23rd from a heart attack. Dr. Conboy was head physician at the Salvation Army Women's Hospital and was on the staff of the Western Hospital since his graduation.

* * *

TORONTO, ONT.—The Toronto General Hospital recently added to its supply of radium 504 millograms, valued at $42,276.38. This brings the hospital's supply up to 976 millograms, with a value in excess of $80,000. This is said to constitute more than half of the total

radium supply of the province. The shipment came from Belgium, arriving via Washington, where it was tested for quality and quantity by the Bureau of Standards. While in transit the radium was enclosed in needles, packed in units of ten in heavy lead boxes, which in their turn were specially packed in lead containers, stored in the ship's vaults, and later in heavy safes.

* * *

TRANQUILLE, B.C.—Dr. A. D. Lapp recently observed the tenth anniversary of his superintendency of the Tranquille Sanatorium. The decade intervening has witnessed considerable expansion in the institution, its capacity having increased in that time from 200 to 330 beds, and various services and departments were added.

* * *

VANCOUVER, B.C.—Vancouver's newest hospital unit is the fine new 150-bed wing at St. Paul's Hospital, which cost in the neighbourhood of $500,000. This was officially opened on October 27th. In addition to the usual services it has 12 surgeries in pairs, separated by sterilizing rooms. It is expected that this fine addition to British Columbia's hospital facilities will be described in an early issue of The CANADIAN HOSPITAL Journal.

* * *

VANCOUVER, B.C.—Construction of a new building for the Crippled Children's Hospital will probably be undertaken next spring. Lease of the present hospital at Marpole expires at the end of the present year, but the hospital will be permitted to occupy its present quarters until such time as the new structure is complete. The institution planned will probably have accommodation for 50 patients.

* * *

WELLAND, ONT.—The Welland County General Hospital is organizing in such a manner as will make it eligible for standardization according to the requirements of the American College of Surgeons.

* * *

WELLAND, ONT.—The Board of Governors of the Welland County Hospital are considering the possibility of sponsoring a "Hospital Sunday" yearly in the local churches, upon which day a special collection would be asked for the hospital. The Board has in its possession considerable information on the manner in which "Hospital Sunday" is managed in London, England, where this plan works very advantageously.

* * *

WELLAND, ONT.—The Welland Rotary Club and the Port Colborne Lions Club have donated a Children's Ward to the Welland County Hospital, this being recently dedicated by Rev. W. G. O. Thompson of Port Colborne. The two large rooms which comprise the Children's Ward are beautifully furnished, the colour scheme being cream and walnut brown. A sunroom adjourns, this being furnished with cream and green wicker furniture.

* * *

WINDSOR, N.S.—At a recent meeting of the Payzant Memorial Hospital Miss Gladys H. Soulis, formerly of Digby, who graduated from the Yarmouth Hospital in 1920, was appointed as superintendent. Miss Soulis was until recently superintendent of the Price Brothers Industrial Hospital at Kenogami, Quebec.

WINDSOR, N.S.—Miss Margaret Martin, superintendent of the Payzant Memorial Hospital, died of cerebral hemorrhage on August 23rd. She was well and favorably known as a woman of splendid personality and an outstanding member of her profession. Miss Martin graduated from the Victoria General Hospital, Halifax, in 1898, since which time she followed her profession both as an institutional and private duty nurse in Nova Scotia, New York City, Tarrytown-on-the-Hudson, Cuba and Virginia. In July, 1922, Miss Martin assumed the superintendency of the Payzant Memorial Hospital.

* * *

YORKTON, SASK.—Miss E. B. Katzberg, a graduate of the Queen Victoria Hospital, Yorkton, has been appointed its superintendent. Miss Mary Lee, also a graduate of the local hospital and a member of the staff for the past four years, has been appointed night supervisor. Miss Katzberg was formerly assistant superintendent of the institution, but had been acting superintendent since the resignation of Miss Thompson.

Kellogg Co. at Convention

The Kellogg Company of London and Battle Creek had an interesting exhibit of its products at the American Hospital Convention this year. Muffins made from All-Bran were featured, and served. A great many hospital superintendents visited the exhibit and were presented with samples of the products, menu suggestions and large quantity recipes.

Mrs. Winifred Loggans of the dietetic staff at the Battle Creek factory was in charge of the exhibit.

G. H. Wood & Co., Ltd., Issue New "Sanitary Products" Catalogue

G. H. Wood & Company ,Limited, point with pride to their attractive and comprehensive new catalogue which features "Sanitary Products" of all kinds. It is, as it were, the culmination of eight years of continual success. This business commenced as a small manufacturers' agency; to-day it is the largest firm manufacturing "Sanitary Products" in Canada, having a staff of over fifty and a payroll of $100,000. It maintains plants at Toronto and Montreal and branch offices at Ottawa, Hamilton, Quebec and Halifax.

This catalogue is of very convenient size, is profusely illustrated and should have a place on the bookshelf of every purchasing agent in our Canadian hospitals from coast to coast. In it will be found illustrated and described the many "Sanitary Products" without which no modern institution can properly function. Send for your catalogue now to G. H. Wood & Company, Limited, at 736 Dundas Street East, Toronto.

New Hospitals Chose Wilmot Castle Sterilizing Equipment

Proof of the excellent reputation which Wilmot Castle sterilizers enjoy in Canada, as well as in the United States, lies in the fact that this company has had the privilege of installing their sterilizing equipment in the new Douglas Memorial Hospital, Fort Erie, Ont., and in the addition to the Hotel Dieu Hospital at Kingston, Ont., both of which were described in detail in the November issue of The Canadian Hospital Journal.

They have also been awarded contracts for installations in the Hôpital St. Luc, Notre Dame Hospital and Verdun General Hospital, all of Montreal, and the Hôpital Ste. Therese at Shawinigan Falls, Quebec.

Combating Anoxemia With Oxygen Therapy

(Continued from page 27)

sugar output, decrease of amount of urine excreted, decrease of blood suger, diminution or disappearance of thirst, hunger and itching. No favourable secondary symptoms were noted.

Methods of Use

Success in using oxygen for the various indications depends upon the administration of a greater volume than is found in the air. The methods most frequently employed, viz:—funnel or mouth tip, are not only wasteful but useless. The ideal method is the oxygen chamber.

Dr. Guedel, an anæsthetist, formerly of Indianapolis, now of Beverley Hills, California, first devised a tent made by cutting a wooden barrel hoop in two parts, fastening it crosswise and covering it with an ordinary sheet. R. Foregger has built a tent, based on this model, which contains a mica window. Inasmuch as the patient is able to see out of this it minimizes the feeling of suffocation that comes from being covered. A more elaborate outfit has been devised by Roth-Barach. This provides cooled oxygen. It is a motor driven apparatus, in which provision is made for the return flow of oxygen through soda-lime to be used again after being cooled.

The ordinary face and nasal inhaler are used, particularly when one desires a high percentage of oxygen. Nasal catheters are also used, and it may be given by way of rectum when the patient is delirious and objects to the mask or tent.

In a foundling hospital, in the writer's home town, where pneumonia is a frequent complication, of the various children's diseases, the results with oxygen tent have been so outstanding, that the Superior remarked that pneumonia is no longer a dreaded disease.

If time would permit one could go on indefinitely citing results obtained from the proper use of oxygen.

The field for oxygen therapy is large, and what the future holds for it no one can foretell.

One is justified from the data mentioned and from the results obtained in making a plea for greater use of oxygen. We must be fair and not discredit its use in cases where it is used late and where other pathology exists that is not due to oxygen want. The physician who does not employ oxygen when it is indicated is not giving his patient all the help that is available.

In conclusion let me again quote the words of Dr. Solomon Solis Cohen: "Oxygen to be efficacious must be used freely, frequently, fearlessly or almost continuously, nor must its use be postponed until the patient is moribund, for it will not revive the dead."

Editor's Note: Copies of this article are available from the Foregger Co., Inc., 47 West 42nd Street, New York City.

Positions Wanted

AZNOE'S CENTRAL REGISTRY FOR NURSES
30 North Michigan Avenue, Chicago

POSITIONS WANTED

ANESTHETIST POSITION WANTED by young Ontario registered nurse; good training course; 2 years Anesthesia experience; ready now. Good references. No. 4034. Aznoe's Central Registry For Nurses, 30 North Michigan Ave., Chicago, Illinois.

GENERAL DUTY NURSES AVAILABLE: (A) R.N. Manitoba, age 25; 3 years contagious disease experience; well recommended. (B) R.N. Ontario, 1928 graduate; will take either day or night duty; moderate salary. Good! No. 4035. Aznoe's Central Registry For Nurses, 30 North Michigan Ave., Chicago, Illinois.

AZNOE'S CANADIAN DIETITIANS: (A) Thoroughly experienced hospital dietitian, trained at leading Canadian universities, desires Head Dietitian appointment; excellent references. (B) Young Canadian lady, B.S. from University of Alberta, completing 6 months' hospital dietetic course, desires Assistant position. No. 4036. Aznoe's Central Registry For Nurses, 30 North Michigan Ave., Chicago, Illinois.

HOSPITAL RESIDENCY WANTED by M.D. Manitoba, young, Protestant; 1 year rotating internship; 1 year residency Children's Hospital; good credentials. No. 4037. Aznoe's Central Registry For Nurses, 30 North Michigan Ave., Chicago, Illinois.

ANESTHETIST APPOINTMENT to first class hospital wanted by M.D. McGill University; 1 year P.G. course Montreal; 3 years specializing in Anesthesia; an outstanding physician; prefers Pacific Coast. No. 4038. Aznoe's Central Registry For Nurses, 30 North Michigan Ave., Chicago, Illinois.

EXPERIENCED WOMAN LABORATORIAN seeks Canadian position; graduate nurse; 10 years laboratory experience; prefers East. Salary open. No. 4039. Aznoe's Central Registry For Nurses, 30 North Michigan Ave., Chicago, Illinois.

POSITIONS OPEN

DIETITIANS WANTED: 125-bed Catholic hospital, located southeastern Canada, seeks experienced Dietitian; salary depends on experience. No. 4040. Aznoe's Central Registry For Nurses, 30 North Michigan Ave., Chicago, Illinois.

THE MEDICAL BUREAU
M. Burneice Larson, Director
Pittsfield Building, Chicago

POSITIONS WANTED

ANAESTHETIST—Graduate of a Canadian hospital; course in anaesthesia, Grace Hospital, Detroit; year's experience as anaesthetist; age 34; will combine supervising with her duties as anaesthetist. 105, Medical Bureau, Pittsfield Building, Chicago.

SUPERVISOR—Canadian nurse, graduate of Winnipeg General Hospital desires position as supervisor on surgical floor; has had six years' experience as surgical supervisor. 106, Medical Bureau, Pittsfield Building, Chicago.

DIETITIAN—B.S. degree in Home Economics; taught home economics in public schools for three years, then completed a six months student course; for the past three years has been dietitian to 125-bed hospital; an excellent organizer and tireless worker; age 28. 107, Medical Bureau, Pittsfield Building, Chicago.

SUPERINTENDENT OF NURSES—Graduate of Canadian training school; B.S. degree, Columbia; has done considerable work toward her Master's degree; two years, assistant superintendent of nurses, 500-bed hospital; available any time; will go anywhere. 108, Medical Bureau, Pittsfield Building, Chicago.

DIPLOMAS

DIPLOMAS—ONE OR A THOUSAND—Illustrated circular B, mailed on request. AMES & ROLLINSON, 206 Broadway, New York, N.Y.

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CLASS PINS

We make a specialty of manufacturing rings and pins for hospital training schools; catalogue and special designs on request. J. F. APPLE CO., LANCASTER, PA.

Saskatchewan Association Conducts Important Business at Annual Convention

(Continued from page 13)

reports a nominationg committee was formed for the election of officers. The afternoon round table conference was led by Mr. Leonard Shaw of Moose Jaw, further discussion taking place regarding local conditions. Mr. Shaw advised the convention that his hospital had decided that it was their duty to aid in the reduction of unemployment among their graduates. With this in view they were refraining from the acceptance of student nurses for the time being and were utilizing the services of unemployed graduates at nominal salaries. Methods of reducing overhead were discussed, but it was the concensus of opinion that only small savings could be effected without impairing seriously the services of the hospitals.

A committee consisting of Dr. S. R. D. Hewitt, Mr. W. H. Madden and Mr. H. W. Cookson was appointed to investigate the possibility of raising funds on behalf of the hospitals of the province. Mr. Shaw was then called upon by Mr. Middleton to explain the "Flat Maternity Rates" in existence at the Moose Jaw General Hospital. (This was outlined in detail in the August issue of The CANADIAN HOSPITAL Journal.) The delegates were assured of the success of this scheme should it be adopted in their institutions. A resolution was passed asking for a reciprocal arrangement between the Saskatchewan and Alberta Governments affecting the care of the indigent sick similar to the arrangements made between Manitoba and Saskatchewan for the special benefit of border municipalities.

The following officers were elected for the ensuing year: President — Mr. Leonard Shaw, Superintendent, Moose Jaw General Hospital; 1st Vice-President—Dr. S. R. D. Hewitt, Superintendent, Regina General Hospital; 2nd Vice-President—Mr. A. Esson, Rosetown; 3rd Vice-President—Mrs. B. L. Waycott, Saskatoon; Secretary—Mr. G. E. Patterson, Regina. The Executive committee comprises the following: Mr. J. M. Clark, Yorkton; Mr. E. F. Webb, Prince Albert; Sister Mary Raphael, Moose Jaw; Mr. J. Needham, Unity, and Mr. H. W. Cookson, Weyburn.

It was moved by Mr. Clark that the convention hold its next meeting in Moose Jaw, the home town of the President. In accepting the presidency, Mr. Shaw asked that each and every member leave the convention with the fixed purpose of doing everything possible to alleviate the strain under which the hospitals of the province are working.

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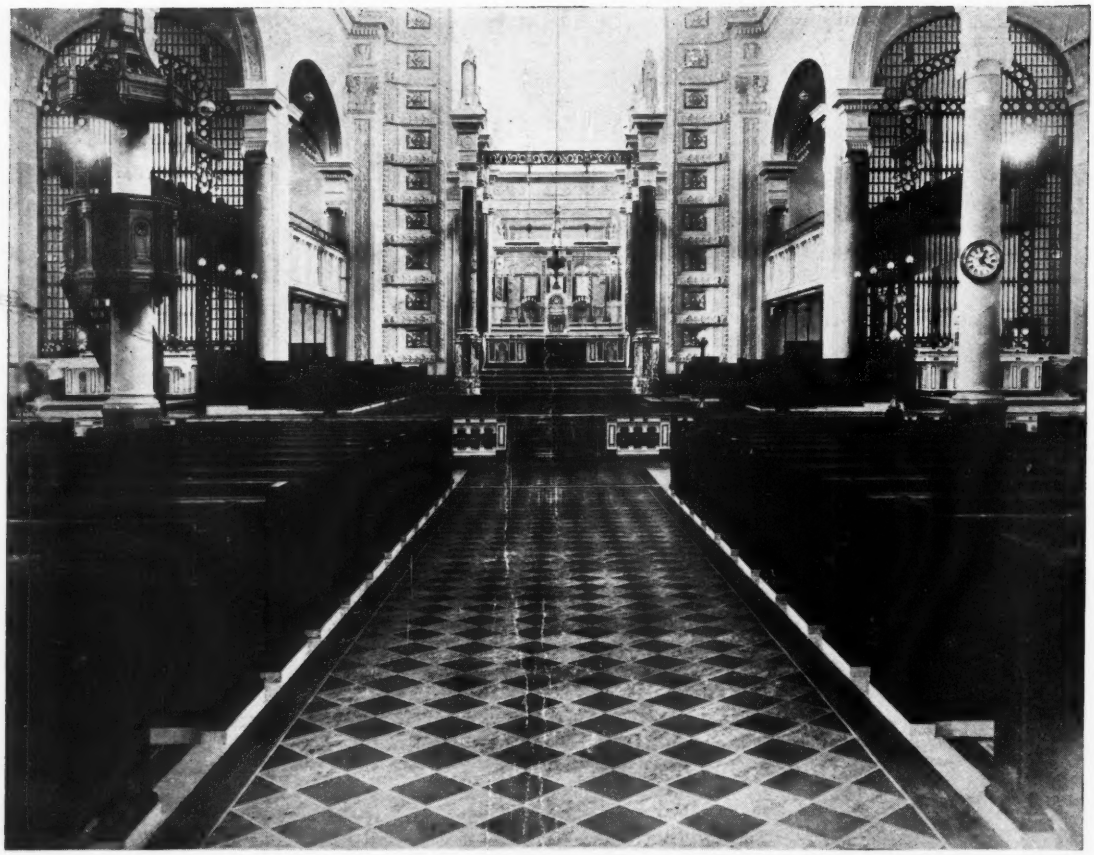

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